

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A liquid crystal display comprising:
 - a liquid crystal panel assembly including a plurality of gate lines, a data line intersecting the gate lines, and a plurality of pixels connected to the gate lines and the data line;
 - a signal controller ~~receiving~~ configured to receive image data and a synchronization signal from an external device, ~~processing~~ process the image data and ~~generating~~ generate control signals for displaying the image data;
 - a voltage generator ~~generating~~ configured to generate a plurality of gray voltages and a gate voltage for driving the panel assembly;
 - a gate driver configured to sequentially ~~scanning~~ scan the gate lines by[[,]] applying the gate voltage, each scanning being performed in a horizontal period including a first ~~period~~ sub-period and a second ~~period~~ sub-period following the first ~~period~~ sub-period;
 - a master data driver configured to sequentially ~~applying~~ apply to the data line one of the data voltages selected from the gray voltages corresponding to the image data, wherein each application is performed in the second sub-period of a present horizontal period; and
 - a slave data driver ~~storing~~ configured to store the data voltage applied to the data line in the second sub-period of the present horizontal period and ~~applying~~ apply the stored data voltage to the data line in the first sub-period of a next horizontal period.
2. (Original) The liquid crystal display of claim 1, wherein two data voltages sequentially applied to the data line have opposite polarity with respect to a predetermined voltage and the slave driver inverts the polarity of the stored voltage before application to the data line.
3. (Original) The liquid crystal display of claim 2, wherein the master driver and the slave driver are disposed at opposite sides of the panel assembly.
4. (Currently amended) The liquid crystal display of claim 2, wherein the slave driver comprises:
 - a storage for storing the data voltages applied to the data line in the second sub-period; and
 - an inverter for inverting the polarity of the data voltages stored in the storage, the storage and the inverter alternately connected to the data line.

5. (Original) The liquid crystal display of claim 4, wherein the storage comprises a capacitor.

6. (Original) The liquid crystal display of claim 4, wherein the inverter comprises an operation amplifier in a negative feedback configuration having a non-inverting input terminal supplied with the predetermined voltage.

7. (Original) The liquid crystal display of claim 4, wherein the slave driver further comprises a switch unit selectively connecting the storage and the inverter to the data line.

8. (Currently amended) The liquid crystal display of claim 7, wherein the switch unit comprises a first switch connected between the inverter and the data line and a second [[,]]switch connected between the storage and the data line, the first switch and the second switch alternately activated.

9. (Original) The liquid crystal display of claim 4, wherein the slave driver further comprises an operational amplifier buffering the data voltage stored in the storage and provides the buffered data voltage for the inverter.

10. (Original) The liquid crystal display of claim 4, wherein the slave driver is formed on the panel assembly.

11. (Original) The liquid crystal display of claim 2, wherein the predetermined voltage is applied to the pixels.

12. (Currently amended) A method of driving a liquid crystal display including first and second gate lines, a data line, a first pixel connected to the first gate line and the data line, and a second pixel connected to the second gate line and the data line, the method comprising:

scanning the first gate line;

applying a first data voltage to the data line during the scanning of the first gate line;

receiving the first data voltage from the data line and storing in a capacitor the first data voltage during the scanning of the first gate line;

scanning the second gate line during a horizontal period comprising a first sub-period and a second sub-period;

applying the stored first data voltage from the slave data driver to the data line during the first sub-period of the scanning of the second gate line; and

applying a second data voltage to the data line during the second sub-period of the scanning of the second gate line.

13. (Original) The method of claim 12, further comprising:
inverting polarity of the stored first data voltage before the application of the stored first data voltage.

14. (Original) The method of claim 13, further comprising:
buffering the stored data voltage before the polarity inversion.

15. (Currently amended) A liquid crystal display comprising:
first and second pixels;
first and second gate lines connected to the first and the second pixels, respectively;
a first data line connected to the first and the second pixels;
a gate driver configured to scan the first gate line in a first horizontal period and scan the second gate line in a second horizontal period, each horizontal period including a first sub-period and a second sub-period following the first sub-period ~~scanning the first and the second gate lines in first and second periods, respectively~~;

a master driver configured to apply a first data voltage to the data line in the first horizontal period and a second data voltage to the data line in the second horizontal period, wherein each application is performed in the second sub-period of each horizontal period ~~applying first and second data voltages to the data line in the first and the second periods, respectively~~; and

a slave data driver configured to store the first data voltage applied to the data line in the second sub-period of the first horizontal period ~~storing the first data voltages in the first period and applying~~ and to apply the stored first data voltage to the data line in the first sub-period of the second horizontal period ~~in the second period~~.

16. (Original) The liquid, crystal display of claim 15, wherein the first and the second data voltages have opposite polarity with respect to a predetermined voltage and the slave driver inverts the polarity of the stored first voltage before application to the data line.

17. (Original) The liquid crystal display of claim 16, wherein the slave driver comprises:
a storage for storing the first data voltage; and

an inverter for inverting the polarity of the stored first data voltage, the storage and the inverter are alternately connected to the data line.

18. (Original) The liquid crystal display of claim 17, wherein the slave driver further comprises a switch unit selectively connecting the storage and the inverter to the data line.

19. (Original) The liquid crystal display of claim 18, wherein the switch unit comprises a first switch connected between the inverter and the data line and a second switch connected between the storage and the data line, the first switch and the second switch alternately activated.